A new record for Algeria by B. P. Hall Received 14th May, 1970

In the course of a tour of the Algerian Sahara organised by Desertways Expeditions, I visited the village of Amsel, 15 miles south of Tamanrassat. Here there is good water and a government agricultural project.

On 12th April, 1970, in tamarisk trees alongside the stream, I watched for about 15 minutes two Silverbills, *Lonchura malabarica* (=*Eudice cantans*). I was accompanied by Major P. H. Cordle and Miss P. L. Wright and we all had a good view of them with field glasses, so there was no possibility of misidentification.

The species has not before been reported from Algeria though is not unexpected as it breeds at Atar in Mauretania in the same latitude (Etchécopar and Hüe 1964 Les Oiseaux du Nord de l'Afrique, Paris: 557).

Notes on the plumage of Buzzards from Socotra by P. G. H. Frost and W. R. Siegfried Received 9th April, 1970 INTRODUCTION

The discussions by Benson & Irwin (1963) and Moreau (1966) on the relationship between the endemic Buteo occuring on the island of Socotra, and the various mainland Buteos, have prompted us to examine the plumage of this as yet undescribed bird. The basic plumage characteristics of the small resident African Buteos (*Buteo oreophilus oreophilus* in East Africa and *B. o. trizonatus* in South Africa) and the palaearctic migrant *B. buteo vulpinus* have recently been reviewed (Siegfried & Frost, in press), and it seems appropriate at this stage to provide a general description of the Socotran Buzzard *Buteo* sp., pending publication of a review of the phylogenetic origins of the small African Buteos (Siegfried, in press).

MATERIAL

So far as can be established there are six specimens of buzzards from Socotra. Four are located in the British Museum (Natural History), and are those referred to by Benson & Irwin (1963) and Ripley & Bond (1966). The two other specimens are housed in the Liverpool Museum collections (Wagstaffe, *in litt.* 1969). During 1969 one of us (P.G.H.F.) examined the British Museum material. Acquaintance with the Liverpool Museum material is solely through notes and photographs kindly supplied by R. Wagstaffe, Keeper of Vertebrate Zoology at the museum. A further series of nine colour slides of wild birds photographed in Socotra, and supplemented with field notes, were lent to us by A. D. Forbes-Watson of the National Museum, Nairobi. All this material is described separately, but the whole is considered in the discussion on the relationships of the Socotran Buzzard.

If we apply the same criterion for ageing small Buteos as reviewed previously by us (Siegfried & Frost, in press), that is, the width of the subterminal tail band compared with the width of the more proximal tail bands, it appears that the British Museum material consists of two adult birds (with broader subterminal tail bands) and two juvenile first-year birds (with subterminal tail bands equal in width to the more proximal tail bands). Of the latter, one is a well grown fledgling of a pair collected from a nest in eastern Socotra (Ogilvie-Grant & Forbes, in Forbes 1903). The other fledgling of this pair is housed at Liverpool together with an immature bird also collected by Ogilvie-Grant (Wagstaffe, *in litt*. 1969).

The collection data for these six specimens are recorded in Table 1 and mensural data in Table 2.

DESCRIPTION OF BRITISH MUSEUM MATERIAL

Immature First Year Birds

Underparts: The ground colour of the underparts is cream white with a heavy suffusion of buff in the feathers of the upper breast and thighs. This suffusion is least extensive in the older juvenile bird and is confined to broad

TABLE 1 COLLECTION DATA ON BUZZARDS FROM SOCOTRA

Catalogue No.	Age Sex	Date	Locality	Collector	Reference to Plates 1 and 2
B.M.99.8.11.10	Ad/Unsexed	28.1.99	Elhé	Ogilvie-Grant & Forbes	А
B.M.99.8.11.11	Fledg./♀	22.1.99	Hamidero	Ogilvie-Grant & Forbes	С
Liverpool 296	Fledg./ð	22.1.99	Hamidero	Ogilvie-Grant & Forbes	
Liverpool 253	Imm./ð	17.1.99	Dimichiro	Ogilvie-Grant & Forbes	-
B.M.1934.8.12.2	Ad/ð	9•3•34	Momi	M. T. Boscawen;	В
B.M.1934.8.12.3	Juv/♀	9•3•34	Momi	(1966: 354) for details	D

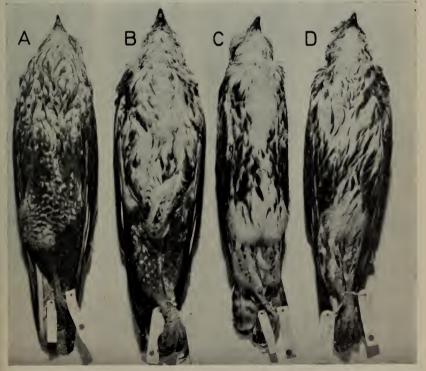


Plate 1. Ventral aspect of specimens of Buteos from Socotra.

TABLE 2. MEASUREMENTS IN MILLIMETRES OF BUZZARDS FROM SOCOTRA

Catalogue No.	Wing	Tarsus	Culmen	Tail
B.M.99.8.11.10 B.M.99.8.11.11 Liverpool 296 Liverpool 253 B.M.1934.8.12.2	345 Underdeveloped Underdeveloped 346 365	Whole/Bare 74/50 74/55 70/40.5 82.5/48.0 78/56	21.0 21.5 18.0 23.0 26.0	173 Underdeveloped Underdeveloped 181 Moulting
B.M.1934.8.12.3	345	86/57	22.0	189

feather edgings on the upper breast and upper thigh regions. The breast markings consist of a series of irregular dark brown streaks and blotches, occuring in greatest concentration on the flanks and sides of the lower breast. The abdomen is unmarked except for a few thin dark shaft streaks. The markings on the thighs vary from dark brown heart-shaped blotches on the fledgling bird, to broad elongated dark brown streaks on the older immature bird (Plate 1. C.D.)

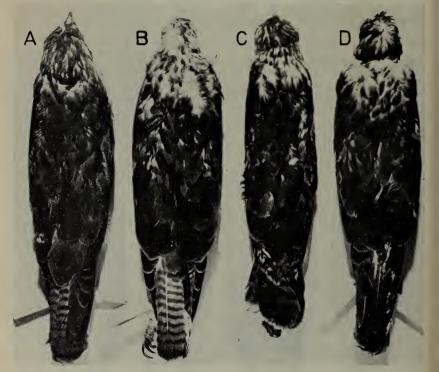


Plate 2. Dorsal aspect of specimens of Buteos from Socotra.

The underwing coverts are cream with irregularily placed dark brown feathers which are edged with chestnut buff.

Upperparts: The feathers of the upperparts are dark brown, with extensive rufous edging occurring on the feathers of the nape, neck, upperback and upperwing coverts. In the upper tail coverts the rufous occurs as transverse

bars on the dark brown feathers. The edging of these feathers is either rufous or, in some cases, a dark cream buff. Cream buff edging also occurs on feathers of the nape and neck (Plate 2. C.D.).

Tail: The colour of the upper tail is dark brown transversed with darker brown/black bands. Unlike the other feathers of the upperparts, the tail feathers lack any rufous colouring.

Adults

Underparts: The breast colour is dirty white with rufous brown markings. In specimen A in Plate 1 the upper breast is streaked, the flanks and thighs are an almost uniform rufous brown, while the lower breast and abdomen are marked with horizontal bars of rufous brown. In specimen B the breast is pale and less marked with rufous brown. The upper and lower breast regions are irregularily streaked with rufous brown and the flanks are not as extensively coloured as in specimen A. The abdominal feathers are horizontally barred while the thighs are almost uniform rufous brown with extensive white speckling. The buff colour found in the two juvenile birds is confined in both adult birds to a few feathers on the upper breast, and in specimen B to the upper thigh regions also. The underwing coverts are pale with dark brown streaks edged sparingly with rufous. This colouring is more extensive in specimen A.

Upperparts: The feathers of the back are the same colour as in the juvenile birds but the rufous edging to the feathers is restricted to the upper back and less extensively to the upperwing coverts. The upper tail coverts are only slightly barred with rufous and are edged broadly with the same colour.

Tail: The tail of specimen A is greyish brown traversed with dark brown bands, the subterminal band being broader than the more proximal bands. A little rufous wash occurs in the tail feathers. In general the old tail feathers of specimen B, the tail of which is in moult, are similar in colour and pattern to those of specimen A, which shows no moult. However, the new tail feathers, which are only half unsheathed, are dark brown as opposed to grey brown of the old feathers. It appears that these feathers may pale to grey-brown only after they are fully developed.

Finally, a correction must be made to the paper by Ripley & Bond (1966), in which they mention an adult male specimen collected on September 3rd, 1934. In fact this specimen (B.M. 1934.8.12.2) was collected on 9th March, 1934. The mistake has apparently arisen out of the different shorthand notations for these dates. The notation 9.3.34 would be interpreted in America as Sept. 3. 34, placing the month before the date.

REMARKS ON THE LIVERPOOL MUSEUM MATERIAL

The following remarks are based on black and white photographs supplied by the Liverpool Museum. The fledgling bird is almost identical to the fledgling (B.M. 99.8.11.11) housed in the British Museum, from which it differs only in that the thighs are slightly more spotted.

According to Wagstaffe (*in litt.* 1969), the immature specimen is not quite fully adult, as it has some juvenile feathers on the upper breast and a few on the upperparts. It is similar in pattern to B.M. 1934.8.12.2 but has slightly more barring on the lower breast and abdomen. The feather pattern of the upper breast is similar to that of B.M. 1934.8.12.3.

DISCUSSION

In a previous paper (Siegfried & Frost, in press) we have pointed out the essential differences between the African populations of *Buteo oreophilus* and

the palaearctic migrant *B. b. vulpinus.* Briefly they are that oroephilus is characterised by having a white breast marked with a pattern of clearly defined, longitudinally directed tear-shaped spots in both immature and adult plumages. *B. b. vulpinus* on the other hand is characterised by having a longitudinal streaked breast pattern in the immature plumage, which is replaced in the adult with a pattern of horizontal bars. In addition it is a highly variable population showing a wide range of colour morphs including a strong tendency towards obscurance of the breast pattern due to saturation with various shades of brown, a condition which is almost entirely absent in both *B. o. oreophilus* and *B. o. trizonatus*.

Hall and Goodwin (in Benson & Irwin, 1963) believe that the Socotran Buzzard is closest to *oreophilus* in size and colour. Moreau (1966), however, considers that the most likely explanation for the occurrence of a resident Buteo on Socotra, and indeed of *oreophilus* in East Africa, is that an extension of the range of *B. b. vulpinus* into the tropics occurred during the glacial periods of the Pleistocene.

Ripley & Bond (1966) failed to make any racial allocation, and instead suggested that variations in the bill measurements may indicate the presence of northern migrants (*B. b. vulpinus*) in the series. In this respect Forbes-Watson who spent some time on Socotra wrote: "I agree that there may be resident and migrant (non-breeding) populations, but I saw no sign of migration, nor flocking such as one sees in *vulpinus* in East Africa, with soaring groups of 20 or more" (*in litt.* 1969).

Therefore because of the possibility of northern migrants in the series, a careful scrutiny needs to be made of all the specimens involved, before any attempt is made to define their racial affinities. One can, for obvious reasons. isolate the two fledgling birds as being undoubted residents of the island. The juvenile specimen B.M. 1934.8.12.3 is so clearly an older version of the two fledgling birds that it too is considered to be resident. Specimens 253 and B.M. 1934.8.12.2 are also similar in plumage. They are both mensurally different from *oreophilus* and *vulpinus* in having very long stout tarsi and heavy feet. Both have some horizontal barring in the lower breast region, while the streaking of the upper breast feathers is narrower than in *oreophilus* but broader than in *vulpinus*. They also have dark flanks, a feature shared with the two fledglings and the juvenile bird. Finally the dark brown upperparts, similar in colour to oreophilus, distinguish at least specimen 1934.8.12.2 from vulpinus, though these feathers are broadly edged with rufous, a condition which is not characteristic of *oreophilus*. One can conclude that the above two specimens also belong to the island race.

This leaves the last specimen 99.8.11.10, an unsexed adult. In many respects this is a tantalizing specimen. Characters such as the colour of the upperparts, the rufous edging to the back feathers, and the dark flanks would appear to secure its position with the other specimens. However, the tarsi are both smaller and lighter than in these specimens and there is also a difference in the culmen and tail measurements. Because of these mensural differences there is the possibility that this specimen could be *B. b. vulpinus*, and therefore it cannot be considered in the following discussion.

From the preceding remarks it appears that the island race is intermediate between *oreophilus* and *B. b. vulpinus*. The resemblance to *oreophilus* is most striking in the juvenile plumages where both have buff edgings to the feathers of the underparts, together with pale thighs and tear-shaped breast spots, though in the Socotran Buzzard these spots are narrower than in *oreophilus*. There is also similarity in the colour of the upperparts, but as stated earlier, the broad rufous edging is not characteristic of oreophilus.

In the adult plumage the presence of horizontal barring of the lower breast and abdominal feathers is also uncharacteristic of oreophilus and is similar to the patterns found in vulpinus. It has been argued elsewhere (Siegfried & Frost, in press; Siegfried, in press) that this horizontal barring in the adult is a basic difference between B. oreophilus amd B. b. vulpinus.

On this basis the Socotran Buzzard would appear to be closer to *vulpinus* than to *oreophilus*. This view is supported by a number of other observations. The tail bands, for instance, are narrower than in oreophilus and appear similar to those of vulpinus. The breast markings are not as clear cut and as well spaced as in *oreophilus*. There is a tendency for these markings to merge, for example in the dark thighs of the adult. Forbes-Watson (in litt. 1969) mentions a bird seen near Kishin which was very dark in colour and almost uniform below, while some of the colour slides show another different bird in which there is considerable merging of the underbody markings.

Hall and Goodwin (in Benson & Irwin, 1963) have drawn attention to the "heavier legs" of Socotra birds than of B. b. vulpinus. In the two immature birds and the adult the tarsi are heavier even than in *oreophilus*. In this respect it is interesting to note that in at least one other island Buteo (B. brachypterus in Madagascar, pers. obs.) there is a tendency towards heavy tarsi and large feet. This condition, together with that of a large culmen, is probably adaptive to an island existence (vide Grant 1965; Schoener 1965, 1969).

The Socotran Buzzard therefore would appear to be a form intermediate between B. buteo of the Palaearctic and B. oreophilus of Africa, with closer affinities to the former than to the later, and as such may be considered a separate race of B. buteo. However, we have deliberately refrained from naming this race because we consider that a single adult specimen of a bird so closely related to B. buteo, which is well known for the plumage variability of its widespread populations, is insufficient material on which to base a formal description of the race. As mentioned earlier, notes supplied by Forbes-Watson (in litt. 1969) indicate that the population of the Socotran Buzzard is more variable in its plumage, than the series just described would seem to indicate.

ACKNOWLEDGMENTS

We wish to express our appreciation to Mrs. B. P. Hall, and Messrs. I. C. J. Galbraith and P. R. Colston of the British Museum (Natural History), for assisting one of us (P.G.H.F.) in locating specimens. In addition we thank Mr. R. Wagstaffe for kindly supplying data on the two specimens in the Liverpool Museum. We are also grateful to the photographic departments of the two museums for providing photographs of specimens, and to Mr. A. D. Forbes-Watson, of the National Museum, Nairobi, for lending us his slides and for supplying certain field notes.

References:

Benson, C. W. & Irwin, M. P. Stuart, 1963. Some comments on the Atlas of European Birds from the Ethiopian aspect. Ardea 51 (2): 212-229.

Forbes, H. O. 1903. 3 (Ed.) The Natural History of Sokotra and Abd-el-Kuri. Free Public Museums, Liverpool.

Grant, P. R. 1965. The adaptive significance of some size trends in island birds. Evolution 19 (3): 355-367. Moreau, R. E. 1966. The Bird Faunas of Africa and its Islands. Academic Press, London. Ripley, S. D. & Bond, G. M. 1966. The birds of Socotra and Abd-el-Kuri. Smithsonian

Mise. Coll. 151 (7): 1-37.
Schoener, T. W. 1965. The evolution of bill size differences among sympatric and congeneric species of birds. *Evolution* 19 (2): 189-213.

Schoener, T. W. 1969. Models of optimum size for solitary predators. Amer. Natur. 103:

277-313. Siegfried, W. R. (in press). Affinities of the small African and Palaearctic Buteos. Proc. Third Pan-Afr. Orn. Congr., Ostrich Suppl.

Siegfried, W. R. & Frost, P. G. H. (in press). Systematic notes on the small African Buteos. Ardea.

In 1900 Forbes gave the University Museum of Zoology, Cambridge, some 30 land birds collected by Ogilvie-Grant and himself on Socotra. But a careful search has not revealed any buzzard.-Ed.]

Some non-passerine bird weights from East Africa by P. L. Britton

Received 4th April, 1970

Britton and Dowsett (1969) and Brooke (1969) together provide a full bibliography of African weight data, save for Liversidge (1968). Published data from collected birds are available for Tanzania and Uganda, but none are available for Kenva.

This paper lists 1004 weights of 223 species. The majority are from Kenya but 82 are from Tanzania and 52 from Uganda. A small series from the Omo River, southern Ethiopia (E) in June is included. Most of these weights are of specimens in the National Museum, Nairobi (to 31st July, 1969), but 220 are from the ringing schedules of the East Africa Natural History Society (to 30th June, 1969). Apart from two recent specimens, diurnal raptors in the National Museum have been ignored as their weights are included by Brown and Amadon (1968). Wintering palearctic birds are excluded, but I have deposited a list of 132 weights of 47 palearctic species (including passerines) from the National Museum collection with the B.T.O., Tring, England. I have recently ringed and weighed a large number of birds in western Kenya, but none of these data are included as I am improving my series of most species and intend to publish them at a more appropriate time.

As the weights listed were obtained by many workers, and their methods are in many cases unknown, there is a likelihood of some error. I have, therefore, omitted a few impossibly heavy or light birds, but have otherwise presented the data as they were found.

If all data for a species are from one locality it is mentioned, but it would be too complicated to mention localities in other cases. Similarly, dates are included for only a few species. Age is not mentioned except for birds in immature plumage (imm.) and juveniles (juv.), and wing-lengths (in mm) are given only for juveniles. Females with considerably enlarged ovaries are considered separately and are marked as breeding (Q b.). Figures in parenthesis after extremes are averages, and standard deviations are included here when samples are sufficiently large. All weights are in grammes. Order and nomenclature follow White (1965).

Podiceps ruficollis: 33 185, 205; \$ 150; \$\$ b. 165, 170, 175; 3 imm. 160; L. Naivasha.

P. cristatus: 3 960; 9 910; 9 b. 920; 9 juv. 670, wing 165; L. Naivasha. Pelecanus onocrotalus: 33 11800, 12550; 0 12300; L. Naivasha.

Phalacrocorax carbo: 22 1590, 1820, 1820, 1930; L. Naivasha. P. africanus: 3 440, L. Naivasha, Dec.

Anhinga rufa: 3 1050; 2 b. 1130.

Ixobrychus minutus payesii: 3 71, L. Naivasha, Jan.

I. sturmii: 3 imm. 142, Nairobi, May.

Ardeola ibis: 33 340, 370; 2 b. 340; 0 290.

Butorides striatus: \$ 235.

Egretta alba: 3 1110, L. Baringo, August.